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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,216	03/15/2004	Akihiro Maezawa	KOY-0036	3130
23413	7590	06/21/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			SCHILLING, RICHARD L	
			ART UNIT	PAPER NUMBER
			1752	
DATE MAILED: 06/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801210

Applicant(s)

maezawa et al

Examiner

AL Schilling

Group Art Unit

1752

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-7 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-7 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The drawing(s) filed on 3-15-04 is/are accepted by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s): 11-4-04 41-2005
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawabata et al. '046. Kawabata et al. (see particularly column 3, line 39 - column 4, line 5; column 5, line 64 - column 6, line 19; column 6, lines 54-61; column 9, line 42 - column 10, line 6) discloses making phosphor crystals on supports by vapor deposition wherein the distance between the phosphor

materials and supports is 10 to 60 cm with support temperatures being controlled to control crystal width. The supports may be heated or cooled. Alkali halide phosphors are preferred. If the evaporation speeds in Kawabata et al. are not inherently over .5 microns per minute as required by instant claims 1-4, then it would at least be obvious to one skilled in the art to use higher speeds since Kawabata et al. disclose using multiple heating resistance heaters and/or electron beams. Also, the panels of claims 5-7 are not materially different from those of Kawabata et al. even if made by vapor deposition at different speeds. The comparative Examples in the specification do not necessarily show different panels for the different evaporation speeds of 10, 20 and 40 microns per minute at a distance of 28 cms and substrate temperatures of 150°C since panel thicknesses are not specified in the Examples. Thicker panels would have higher X-ray absorption and luminescent values (see Figure 5 of Kawabata et al.). The Examples in the specification do not specify thicknesses of the deposited phosphors, i.e. heights of crystals, or time of deposition. Also, the Examples in the specification are limited to preferred alkali metal phosphors within those of claim 6 with CsBr and Eu activators which are disclosed in applicants' specification on pages 3 and 4 as having problems due to support heating.

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2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Iwabuchi et al. Iwabuchi et al. (see particularly paragraphs 39-41; 45, 110) discloses making panels by vapor depositing phosphors onto supports at vacuums of 1.33×10^{-4} to 1.33×10^{-2} Pa at a distance of 5-150 cms and at evaporation rates of preferably 1-100 microns per minute. The supports may be cooled or heated. If Iwabuchi et al. do not anticipate the instant claims, then it would at least be obvious to one skilled in the art to form phosphor panels using vacuums, i.e. 1×10^{-2} Pa.

3. The prior art submitted by applicants has been considered.

4. Any inquiry concerning this communication should be directed to Mr. Schilling at telephone number (571) 272-1335.

RLSchilling:cdc

June 14, 2005

RICHARD L. SCHILLING
PRIMARY EXAMINER
GROUP 1100-1752

